## REMARKS

Claims 1-5 are presented for further examination. Claims 1, 4 and 5 have been amended, and claims 6-8 are cancelled.

In the Office Action mailed October 27, 2008, the Examiner objected to use of "intranet" in the specification on page 1, line 7, requesting a change to "Internet." Claims 1, 4-6, and 8 were objected to because of lack of antecedent basis for "the association analysis server" in step (4). Claims 1-2, and 7-8 were rejected under 35 U.S.C. \$103(a) as obvious over U.S. Patent No. 6,405,251 ("Bullard") in view of U.S. Patent No. 6,418,467 ("Schweitzer"). Claim 3 was rejected as obvious over Bullard in view of Schweitzer and further in view of U.S. Patent No. 7,155,608 ("Malik"). Claims 4-6 were rejected as obvious over Bullard, Schweitzer, Malik, and further in view of Official Notice.

Applicant respectfully disagrees with the bases for the rejections and requests reconsideration and further examination of the claims.

## Objection to the Specification

Per the Examiner's request, applicant has deleted the word "Intranet" on page 1, line 7 of the applicant's substitute specification and substituted therefore the word "Internet."

## Claim Objection

Claims 1, 4-6, and 8 were objected to under 37 CFR 1.75(d)(1) because of an improper use of antecedent basis.

In order to overcome the objections, "the association analysis server" in claim 1 has been amended to "an association analysis server"; the limitation "wherein in step(3)" recite in claims 4-5 has been amended to "wherein in step (3) in claim 3"; claims 6-8 have been cancelled.

## Claim Rejections - 35 USC 103

The Examiner rejected Claim 1 over Bullard et al (US 6,405,251 B1) in view of Schweitzer et al (US 6,418,467 B1) under U.S.C.103(a).

Applicant has amended independent claim 1 to include the technical features of claims 6-8, as follows:

 A method for collecting network usage data of a user, comprising the following steps:

- (1) an access device authenticating and authorizing the user, and an Authentication, Authorization and Accounting Server (hereinafter referred to as AAA server) recording the user's network resource information authenticated and authorized, the user's network resource information comprising a user's account number, a start time and a stop time of network access, an IP address, a network access location, and a service attribute:
- (2) a router, during network access, recording network usage information, and sending the network usage information to a NetStream Collector (NSC) with User Datagram Protocol messages, the network usage information comprising a source IP address, a destination IP address, a source port number, a destination port number, a number of bytes, and a timestamp;
  - (3) the NSC aggregating the collected network usage information; and
- (4) an association analysis server performing real-time association analysis for the aggregated network usage information and the user's network resource information uploaded from the AAA server to obtain detailed network usage data of the user, the association analysis comprising matching the IP address and a start time and a stop time of network access in the user's network resource information to the IP address and the timestamp in the network usage information to determine the user corresponding to the network usage information.

Applicant respectfully submits that amended claim 1 involves an inventive step over Bullard et al (US 6,405,251 B1) in view of Schweitzer et al (US 6,418,467 B1) for at least the following reasons:

Amended claim 1 recites an AAA server that records the user's network resource information comprising a user's account number, a start time, and a stop time of network access, an IP address, a network access location, and a service attribute. A router records the network usage information that includes a source IP address, a destination IP address, a source port

number, a destination port number, a number of bytes, and a timestamp. An association analysis server performs real-time association analysis by matching the IP address and a start time and a stop time of network access in the user's network resource information to the IP address and the timestamp in the network usage information to determine the user corresponding to the network usage information, so as to obtain detailed network usage data of the user.

Therefore, the method of claim 1 associates isolated network usage information with the user's network resource information uploaded from the AAA server organically, so that the user's access to websites (IP addresses), services (port numbers), duration and traffic, and service attribute in a certain time period is recorded accurately. Furthermore, the network usage information collected with this method is comprehensive, and the data is compact through aggregation; thus the method will not occupy vast storage resources. The final network usage data created with this method may be oriented to users directly, to meet the data demand of diverse applications, such as content accounting, destination IP accounting, real-time accounting, network monitoring, and user behavior analysis. In addition, the method is advantageous in real-time and can meet the real-time demand of the majority of applications.

Bullard discloses accounting systems that collect information from computer networks, in which a <u>DHCP server</u> can supply an IP address-to-username mapping. The Examiner aligns the DHCP server of Bullard with the AAA server of the present method. However, the DHCP server of Bullard <u>cannot record the user's network resource information</u> including a user's account number, a network access location, and a service attribute as defined in the present invention. Therefore, the DHCP server in Bullard can not be considered the equivalent of or aligned with the AAA server of claim I.

Schweitzer discloses network traffic information that is captured at a network information resource in which, an AAA server records and uploads from the AAA server the user's network resource information. However, there is no description of association analysis between the user's network resource information recorded in the AAA server and the network usage information.

Therefore, it would be inappropriate for those skilled in the art to combine Bullard and Schweitzer as the Examiner suggests because there is no recognition in either Bullard or

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Schweitzer of a need or desire to perform the claimed association analysis. Further, even if

Bullard and Schweitzer could be combined, applicant respectfully submits that the combined teaching of Bullard and Schweitzer do not give any enlightenment to conceive the technical

solution of claim 1, because the DHCP server in Bullard can not be aligned with the AAA server

of claim 1 of the present disclosure, and the AAA server in Schweitzer is configured for

recording the user's network resource information but not for association analysis. Thus, those

skilled in the art cannot conceive of the technical solution of claim 1 without first having to

engage in experimentation or creative work. Therefore, the technical solution of claim 1 is non-

obvious over the combination of Bullard and Schweitzer.

Claims 2-5 are allowable for the features recited therein as well as for the reasons

why claim 1 is allowable.

In view of the foregoing, applicant respectfully submits that all of the claims

remaining in this application are in condition for allowance. In the event the Examiner finds

minor informalities that can be resolved by telephone conference, applicant respectfully requests

that the Examiner contact the undersigned by telephone at (206) 622-4900 in order to expeditiously resolve prosecution of this application. Consequently, early and favorable action

allowing these claims and passing this case to issuance is respectfully requested.

The Director is authorized to charge any additional fees due by way of this Amendment, or credit any overpayment, to our Deposit Account No. 19-1090.

Respectfully submitted,

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